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ABSTRACT

While early studies of achievement motivation focused on young men, more recent studies have focused on women's motivation to achieve. Five groups were compared on achievement motivation and achievement-related variables: Women (ages 30-50) who were either homemakers, applicants accepted at college but not attending, or returnees enrolled in degree programs, and male and female college students (ages 18-24). Subjects were evaluated on mastery, work orientation, competitiveness, personal unconcern, locus of control, need for affiliation, problem-score (perceptions of achievement-inhibiting external problems), and support-score (perceptions of achievement-facilitating supports). No differences among the groups were found on tests involving comparisons of individual variables. Negative relationships were found between need for affiliation and work orientation for college women, and between problem-score and work orientation for homemakers. A positive relationship was found between problem-score and locus of control for applicants. A discriminant analysis revealed three dimensions on which the groups differed: (1) returnees were highly differentiated on problem-score; (2) college women and college men were highly differentiated on work orientation and locus of control; and (3) homemakers and returnees were highly differentiated on support-score, need for affiliation, and competitiveness. (Author/NRB)

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Achievement behavior, achievement motivation and related variables: A study of age and sex differences.

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Introduction:

An individual's need to achieve has long been of interest to psychologists, educators, and to the lay public. Theories regarding a need or motive to achieve may be traced back to the work of Murray (1938). While early studies of achievement motivation concentrated on young men, recently there has been an increasing interest in women's motivation to achieve. However, even research investigating the need to achieve in women has tended to focus on the young undergraduate woman. The nature of achievement motivation in older women (ages 30 to 50) is the general concern of this study.

Achievement motivation may be defined in several ways. A "need to achieve" is present when an individual strives to reach a self-imposed "standard of excellence" (McClelland, 1953; Atkinson, 1959). The concept of achievement motivation also implies a "motive to approach success" (Heckhausen, 1967), an internal requirement of a good performance (McClelland, 1955), or participation in competitive activities where doing as well as or better than others is a primary concern (McClelland, Atkinson, Clark, & Lowell, 1953). Other achievement-related behaviors include a unique accomplishment or a long-term investment related to a future goal (McClelland, 1955). The terms "achievement motivation" and "need for achievement" are considered equivalent and will be used interchangeably here.

Sex Differences in Achievement Motivation: A Developmental Overview

Researchers generally report no sex differences in achievement motivation in childhood (Kagan & Moss, 1962: Moss & Kagan, 1961). If any differences are found, they generally favor girls. (Maccoby and Jacklin, 1974).

The overall theme of the literature on achievement motivation in adolescent girls is that there is a moving away from direct competition with males and from achievement behaviors generally, during the teenage years (Gjesme, 1973; Milner, 1949). Adolescent girls demonstrate a growing focus of interest on affiliative needs and social and interpersonal acceptability. While achievement orientation may still be evident, it is generally centered in areas considered more appropriately feminine, such as the social and interpersonal sphere (Freiderich, 1976). In evaluating academic performance as an indication of achievement motivation the ratio of female to male underachievers (those students working below their ability as determined by standardized tests) increases with age and finally female underachievers outnumber males during the college years (Stein & Bailey, 1973). A body of research has accumulated to document that young women are less achievement oriented than are young men, and that when achievement strivings are elicited, they occur only with the arousal of a desire for social approval or a need for affiliation (Dias & Canifio, 1977; Field, 1977; Karabenick, 1976; Watley & Kaplan, 1971). The most well known attempt to account for these findings regarding college age women and achievement motivation was Horner's (1975) doctoral dissertation, in which she found little evidence of need for achievement and the presence of many fantasty projections of fear of negative consequences for competing and succeeding. This general finding of a decrease in achievement motivation in college age women has led many researchers to the conclusion that perhaps lowered achievement is a stable and predictable "fact of life." Actually the few studies which have gone beyond the college age population or which have included a wider

range of women are quite equivocal in finding any sex difference in achievement motivation Cowan (1971). Puryear and Mednick (1974) studied 252 black women and found no evidence of less achievement motivation. Veroff, Atkinson, Feld, and Gurin (1974) collected data from a nationwide sample of 774 men and 597 women. They too found no sex difference in achievement motivation.

Recently, women have been limiting their childbearing to only a few years and they are doing so at a younger age (Baruch, 1967). There has been a concomitantly increasing trend toward returning to paid employment or to the college campuses (Haug & Sussman, 1967). The reason for this is often economic necessity. Self-actualization or a resurgence of a "drive for achievement" is also hypothesized as an additional motivating factor (Henry, 1971; Hoffman, 1975, 1977; Kuhlen, 1968). Changes in women's roles, particularly as their responsibilities decrease, demand a thorough understanding of the nature of women's achievement strivings.

Baruch (1967) is one of the few researchers actively concerned with achievement motivation in mature women. She believes that achievement motivation in most women is particularly tied up with their age and family situations. She views the adult lives of most women as comprised of three phases: one before the advent of children, a second period when home and children are major concerns, and a third in which there is relief from family maintenance. Baruch hypothesized that, under neutral conditions, a need for achievement declines during the first phase, remains depressed in the second, and returns to its earlier level in the third phase.

In order to further test assertions of a developmental aspect in achievement motivation in women, Baruch (1966) measured achievement

motivation in women 5, 10, 15, 20, and 25 years out of college with TAT-type pictures. A significant increase appeared in the 15-year post college graduation group. This was an overall increase, regardless of whether these women had pursued graduate education, professional employment, or remained traditional homemakers. Baruch's findings contrast with those of Powell and Reznikoff (1976), who evaluated achievement motivation among 200 female graduates who were out of college 10 and 25 years. The 10-year graduates showed higher levels of achievement imagery than did the older graduates.

Environmental factors related to achievement motivation

There has been a tendency to evaluate women's achievement strivings apart from external situational factors. Often biological and personality factors are overstated and little attention is given to the very real inhibiting forces which may surround the achievement oriented woman. Achievement oriented behaviors are in contradiction to the traditional social roles prescribed for young women Bem & Bem, 1970). This traditional role involves deference to a husband's career and personal demands, concentration on child care and domestic responsibilities, and the negation of any competitive striving.

Hawley (1972) investigated the relationship between achievement behavior and perception of gender role appropriateness and found that, when achievement oriented women had supportive individuals in their environment, there was little fear of success, nor was there any evidence of other achievement-inhibiting behavior.

For many and perhaps most women, the young adult years may be said to be years of role conflict and role overload (O'Leary, 1977). Role overload may be defined as an overabundance of incompatible demands placed on someone by others in a person's life situation.

e problem is compounded when one feels these incompatible demands be legitimate but simply does not have sufficient time to meet ese expectations. Hall (1972a) has identified fully 16 strategies ed by achievement oriented young women to cope with role conflict. en the conflict between career and family is comehow resolved, le strain continues in that household maintenance chores (Paloma Garland, 1971) are not usually reduced nor is the role expectation emotional support and deference to a spouse's needs (Depner & Leary, 1976; Frieze, Parsons, Johnson, Ruble, & Zellman, 1978).

There may be other external barriers to prevent the expression achievement motivation. These might include the disapproval of ily and friends (Birnbaum, 1975), difficulty in finding and re- ting to men not threatened by a woman's success and achievement ondry & Dyer, 1976), and general societal disapproval.

The developmental nature of this phenomenon of interplay tween internal psychological motivations and external constraints well explored by Lowenthal, Chiriboga, and Thurner (1975). These searchers examined self-concept and achievement striving over e span of life. They evaluated high school seniors, newlyweds, ddle-aged parents, and preretirees. At all stages, men described emselves with adjectives in keeping with the concept of a general ientation toward achievement: ambitious, assertive, competitive, l confident. Women described themselves as charming, cooperative, pathetic, and undecided. However, as the groups tested approached ddle age, women were more and more likely to attribute traits to mselves which were the same as those utilized by men.

Neugarten (1968), too, notes that for women middle age often ings a sense of "increased freedom." There is a new attention to

the self and a positive change in self-concept. Middle age often marks the beginning of a period in which latent talents and capacities may be put to new use. Neugarten discusses middle age for women as a time of selfawareness, selectivity, manipulation and control of the environment, mastery and competence, all of which are related to achievement motivation.

Thus, at different periods in the life cycle different needs will acquire maximal importance. With changes in these needs and the opportunity to satisfy them, there will come changes in the values and expectations for satisfaction of needs for achievement. In evaluating the achievement motivation of older women, it is critical to examine other variables in the woman's life which act to organize the priorities in her life (O'Leary, 1977). Since home management, childrearing, and deference to husband's career are still generally considered a woman's duty, these demands must also be considered in any exploration of achievement motivation. Energetic women often are placed in tremendous role conflict by the continuing demands of their families (Hall & Gordon, 1973; Sheehy, 1974). It follows that, while particular women may score equally high on a measure of an internal need to achieve, their overt achievement behavior may be considerably different because of the influence of external and perhaps conflicting demands and responsibilities.

Five elements emerge from this review. First, achievement motivation is strong in young girls but appears to moderate during adolescence and young adulthood. Second, for women in adolescence and young adulthood, a need for achievement is related negatively to a need for affiliation. Third, young women often express an

achievement-inhibiting concern over societal reactions to their competitive strivings. Fourth, young men and women appear to differ as to their perceptions of the forces that control their accomplishments and successes, or perhaps their overall behavior. Fifth, external factors such as marriageability and the demands of traditional sex role socialization exert an influence on the achievement decisions of young women. These issues merit re-examination in older women.

Achievement Motivation Among Older Women

There is relatively little research available concerning the social psychology of the older woman. The paucity of studies of achievement motivation involving older women has been cited by several concerned researchers (Barrett & Baruch, 1978; Carder, 1977; O'Leary, 1974; Tresemer, 1977). This section will review the few studies dealing with achievement motivation and achievement-related behaviors in older women.

The following studies explore the relationship between need for achievement and some established correlates of such a need. These are: self-esteem, dominance, the Zeigarnik effect, need for affiliation, and locus of control.

Denmark and Guttentag (1967) evaluated the self-esteem of 54 older (over 30 years of age) women applying for college admission. High self-esteem is one of the characteristics of those high in achievement motivation. Analysis showed the greatest self-esteem among the women who had applied and were subsequently accepted for college and the lowest self-esteem among those who had applied but never followed up on their application. A third group, those who

had applied, followed up, but had been rejected, fell between the first two groups on the degree of discrepancy between self-evaluation and ideal self.

Neugarten and Gutman (1968) utilized a projective format in which middle-aged men and women told stories about a two-generation family. Impulsivity, aggression, and dominance were typically ascribed both to the young man and to the older woman in the pictures. The authors noted that, with increasing age in the respondents, depictions of an older man and an older woman, reversed roles in terms of authority and dominance.

Lubetkin and Lubetkin (1971) evaluated whether female graduate students who had interrupted their training would exhibit greater achievement motivation in a competitive situation than would younger female graduate students or even undergraduates. Five groups were evaluated. Groups I and II consisted of an equal number of men and women in undergraduate school (mean age 19.2 and 19.8, respectively). Groups III and IV contained an equal number of men and women in graduate school (mean age 25.0 and 25.9, respectively). These were graduate students who had not experienced a lapse in their academic work. Group V consisted of women in a special program designed to encourage women with a B.A. degree to return to school for advanced training. The mean age here was 40.6 and the mean time between receiving their undergraduate degree and beginning their training was 15.8 years. Analysis of the data revealed that the older female graduate students recalled significantly more interrupted tasks than any of the other groups, thereby demonstrating the hypothesized Zeigarnik effect.

Zatlin, Storandt, and Botwinick (1973) compared four groups of

college women on personality variables, occupational variables, and personal interests. A "late college" group enrolled in a bacculaureate degree program had an average age of 41.2. A "young college" group enrolled in a B.A. program at an average age of 20.4. A matched "no college" group comprised housewives, workers, etc., with a mean age of 42.0 and an "older college" (normal college group who had completed college prior to age 25) had a mean age of 38.5. The authors found that the "late college" group had significantly higher dominance scores and significantly lower need for affiliation than did the other groups. There were no differences among the "young college," "no college," or "older college" groups in need for affiliation. Thus, for some older women increased achievement orientation may be related to a decrement in need for affiliation while, for others, there two factors may vary independently. This issue requires further examination, since the relationship between need for achievement and need for affiliation has been such a cornerstone in the theory regarding women and achievement motivation.

There are conflicting findings about locus of control in adult women. Palmore and Luikart (1974) found a sex difference in locus of control in young adults, with men demonstrating a much more internal locus of control. But Kivett, Watson, and Busch (1977), in a somewhat more controlled study with older adults, found no such sex difference. The relationship between locus of control and achievement motivation in older women still remains unclear. Moreover, these studies do not attempt to elucidate the factors that might differentiate women high in achievement motivation from those mature women who choose not to pursue achievement goals. Nor do

these studies evaluate adequately the external demands and responsibilities which might inhibit achievement behaviors in maturity.

Several points seem evident from the foregoing review:

1. Studies dealing with achievement motivation in women who are beyond the usual college age are scarce. Those that do exist deal with achievement motivation and achievement-related factors in a peripheral manner.

2. While our understanding of achievement motivation and its relationship to other important personality variables is fairly well understood for college age men and women, relatively little is known about such relationships in older womem. Some of the most important, yet relatively unexplored, concomitants of achievement motivation in older women include need for affiliation, locus of control, and fear of success. Evidence has been cited to indicate that there may be important differences in the relationship of such variables to achievement motivation in older women.

3. It is unclear whether individual differences in levels of achievement motivation are the primary determinants of whether an older woman will attempt to express her achievement strivings. There may be no difference in the degree of internal drive to achieve between two older women, but one may have to continue to deal with external barriers to self-expression such as continuing marital and parental responsibilities. These may serve to continue to inhibit achievement behaviors (Darley, 1976). There has been little attention to the relationship between internal strivings to achieve and the external constraints or even supports regarding their expression. If, as the research evidence hints, there is a general resurgence of achievement strivings among older women, but only

some women express these strivings overtly, then the questio of the influence of external and perhaps competing demands must be explored.

4. A longer life span, women's increasing participati in higher education and the work force, and the radical shift i ole expectations for women today necessitate greater study and u - standing of the social psychology of the older woman (Barnet Baruch, 1978; Byham & Katzell, 1972).

Purpose of This Study

The purposes of this study were threefold. First, this dy investigated the nature of achievement motivation in several ups of older women. The relationships between achievement motiv a and several other important personality variables were exami in these groups of older women. These variables included relev personality factors such as the Need for Affiliation, Locus Control, and Fear of Success. Secondly, the relationships u red were compared with those found in groups of college age wome d men. Thirdly, information descriptive of the immediate life ua- tion of these older women was collected and analyzed in orde evaluate the influence of external, environmental barriers a supports on the overt expression of a motive to achieve. En ment and attendance in a college degree program was considered as overt expression of a need to achieve.

Measuring achievement motivation and fear of success

Spence and Helmreich (1978) have designed a self-administered scale to measure achievement motivation in both sexes. The Work and Family Orientation Scale (WOFO-III) was particularly desi d

and tested to overcome many of the previously described shortcomings of older, projective measures of achievement motivation.

Rather than treating achievement motivation as a unitary concept, the scale attempts to measure four identified components of achievement motivation: (a) Mastery--a preference for difficult, challenging tasks; (b) Work Orientation--positive attitudes toward work; (c) Competitiveness--a desire to win in interpersonal situations; and (d) Personal Unconcern--the degree to which one lacks concern with the negative reactions of others to personal achievement and success. (Spence & Helmreich (1978) define their Personal Unconcern scale as conceptually similar to Horner's (1972) Fear of Success.)

Other relevant personality variables

Although there is a well demonstrated negative association between need for affiliation and need for achievement in young men and women, research suggests (French & Lesser, 1964; Lindgren, 1976; Orso, 1969; O'Leary, 1974) that there may be a different relationship between need for affiliation and need for achievement among older women.

High levels of achievement motivation are positively related to an internal Locus of Control in younger men (Phares, 1973). No such clear relationship has been demonstrated among young women. There have been only poorly controlled studies of the nature of Locus of Control among an older female population.

External factors influencing the expression of achievement motivation

We may conceive of the older woman's external life situation as consisting of two opposing forces in regard to achievement motivation.

The importance of these external barriers on the achievement behavior of women of all ages has been generally overlooked by previous studies in this area. Studies involving evaluation of achievement motivation via projective devices have concluded that the lack of response to achievement cues on the part of young women was related to internal deficits in the drive to achieve. Only recent research, such as the work of Monahan, Kuhn, & Shaver (1974), has shown that what may be at work is the woman's knowledge of the conflicting role demands that would be placed on a woman seeking to achieve. The balance of these internal and external forces is likely to determine whether the older women, will attempt to achieve.

Methods

Subjects participation in this study was voluntary. Participants were recruited from within and around a four-year state supported college. Subjects were located among currently enrolled students by examination of available student records and from women within the general community around the campus.

In order to investigate the various aspects of achievement motivation discussed, five groups were identified:

Group 1. This group consisted of older women (age 30-50) who had chosen to continue the more traditional roles of homemaker and wife/mother and had never attended (N = 50) nor applied to attend college. These participants are referred to an "Homemakers."

Group 2. This group consisted of older women (age 30-50) who had initiated application and were accepted to a college program within the last five years, but who had never attended (N = 50). These participants are referred to as "Applicants."

Group 3. This group consisted of older women (age 30-50) who were entering college students for Fall, 1979 (N = 50). These women were recruited from current college classes. They are referred to an "Returnees." This group had behaviorally demonstrated some degree of increased achievement motivation, namely having begun a college program.

Group 4. This group consisted of college age women (18 to 24) who began college in Fall, 1979. These participants are referred to as "Young College Women" (N = 50).

Group 5. This group consisted of college age men (18 to 24) who also began college in Fall, 1979. These participants are referred to as "Young College Men" (N = 50).

In order to observe more accurately the effects of personal motivation and life situation, there was some attempt to control for intellectual ability. Only those respondents who indicated at least a 3.0 high school grade point average were included in the study.

Procedure

All participants were given a packet of self administered questionnaires. Subjects were asked to work independently on completing the questionnaires and to return these by mail or in person to the researcher.

Measures

Each questionnaire packet contained the following measurement instruments:

1. Various forms insuring informed consent, a request for results of the study, and a cover letter describing the research as

as a study of various aspects of maturity."

2. A "Self-Description Questionnaire" adapted to the characteristics of each of the groups. This requested basic descriptive information and also inquired as to the participant's perceptions regarding his or her present life situation. Key questions inquired as to the subjects' perception of barriers to and supports for attending college.

3. The adjective Check List (Gough & Heilbrun, 1965). This consists of 300 adjectives which describe various personal attributes. While the measure has many subscales, of interest here was the affiliation subscale.

4. A "Personal Attitudes Scale" which was actually the 29-item forced-choice Rotter Internal-External Locus of Control Scale (Rotter, 1966).

5. The Work and Family Orientation Questionnaire (Helmreich & Spence, 1978). This is a 32-item objective measure of achievement motivation. It utilizes a 5-point Likert format which measures various aspects of achievement motivation and also attitudes toward family and career.

Design

The goal of this study was to uncover differences among the five groups on the variables of concern. In this study, there is a potential five-group-by-eight-dependent-variable matrix to analyze. The main thesis of this study is that the pattern of differences on achievement motivation and on achievement-related factors will be different when evaluated in a group of older women, compared to young women and/or young men.

The analyses undertaken here evaluated (a) sex differences in achievement-related factors which persist despite age changes (comparison of four female groups versus the one male group); (b) age differences in achievement-related factors (comparison of the three older groups versus the two younger groups); and (c) differences in achievement-related factors among same sex and same age subjects (comparisons among and between the three groups of older women, Homemakers, Applicants, and Returnees).

In order to evaluate overall differences among the groups, a five-group discriminant analysis was carried out for the eight dependent variables. To make specific a priori comparisons among the group means, the Dunn critical values approach was utilized to test the following hypotheses.

Hypothesis I. Achievement motivation will be greater among older women and young college men as compared to young college women.

Hypothesis IIa. Competitiveness will be greatest among Returnees and lowest among Homemakers, with scores of Applicants falling between the two.

Hypothesis IIb. Personal Unconcern will be lowest (greatest fear of success) among Applicants as compared to other groups of older women (Returnees and Homemakers).

Hypothesis IIc. Personal Unconcern will be lower (greater fear of success) among Young College Women as compared to Young College Men.

Hypothesis IIIa. A more internal Locus of Control will characterize Returnees as compared to other groups of older women (Homemakers and Applicants).

Hypothesis IIIb. A more external Locus of Control will characterize the Homemaker group as compared to Returnees and Applicants.

Hypothesis IIIc. A more external Locus of Control will characterize Young College Women as compared to all other groups.

Pearson Product-Moment correlations were calculated to test the following hypotheses related to the degree and nature of the relationship of selected variables with certain groups.

Hypothesis IVa. For Young College Womena and Young College men, there will be a negative relationship between Need for Affiliation and the components of achievement motivation (Mastery, Work Orientation, Competitiveness, and Personal unconcern).

Hypothesis IVb. For Homemakers, there will be a negative relationship between Problemscore and Work Orientation.

Hypothesis IVc. For Applicants, there will be a positive relationship between Problemscore and Locus of Control.

Hypothesis IVd. For Returnees, there will be a positive relationship between Problemscore and Supportscore.

To further examine differences among the groups, a stepwise discriminant analysis was carried out. This analysis determined which of the eight dependent variables best differentiates among the groups. It also identified the dimension (combination of variables) along which the groups maximally differentiated. The analysis was also used to evaluate the ability of the variable selected to adequately predict a given subject's membership in a particular group.

Within each of the five groups, the following dependent variables were evaluated:

Variable	Measure
a. Mastery	WOFO-III

Within each of the five groups the following dependent variables were evaluated:

a.	Mastery	WOFO-III
b.	Work Orientation	WOFO-III
c.	Competitiveness	WOFO-III
d.	Personal Unconcern	WOFO-III
e.	Locus of Control	I-E Scale
f.	Need for Affiliation	ACL
g.	External Barriers and Problems (Problemscore)	Self-Description Questionnaire
h.	External Supports and Incentives (Supportscore)	Self-Description Questionnaire

Results

In order to investigate whether there were overall differences among the groups on the eight variables of interest, a five-group discriminant analysis was performed. Subsequently, univariate *F* and univariate comparisons were made on separate variables to uncover group differences of interest.

The major emphasis in this study was differences among the five groups on the eight dependent variables. A one-factor MANOVA would, therefore, seem appropriate to provide an overall test of the null hypothesis of no group differences. However, for several reasons, a five-group discriminant analysis was used to analyze the data. First, the significance tests and the discriminant weights derived from both analyses are identical. Second, the discriminant program available provided for a stepwise input of variables that might aid in determining their relative importance with respect to differentiating the groups. Third, the discriminant program also

Table 1

Means and Standard Deviations for Dependent Measures According to Subject Group

Groups	$\bar{X}$/sd	Problem-score	Support-score	Mastery (MA)	Work Orientation (WO)	Competi-tiveness (CO)	Personal Unconcern (PU)	Locus of Control (IE)	Need for Affiliation (AF)
Homemakers (N = 50)	$\bar{X}$	13.46	18.72	18.54	21.76	10.70	11.14	7.74	48.44
	sd	(5.54)	(8.84)	(4.95)	(3.40)	(4.29)	(2.82)	(4.85)	(10.64)
Applicants (N = 50)	$\bar{X}$	13.94	17.62	20.34	22.16	12.00	11.32	7.54	45.12
	sd	(6.14)	(7.11)	(5.42)	(1.58)	(3.82)	(3.09)	(3.46)	(9.04)
Returnees (N = 50)	$\bar{X}$	15.38	20.66	20.12	21.84	11.70	11.42	6.68	43.56
	sd	(6.35)	(6.99)	(4.39)	(2.04)	(4.48)	(2.78)	(3.25)	(12.69)
Young College Women (N = 50)	$\bar{X}$	8.56	21.32	19.82	21.98	12.26	10.96	10.06	44.10
	sd	(4.92)	(5.18)	(4.70)	(1.73)	(3.92)	(2.77)	(3.81)	(9.49)
Young College Men (N = 50)	$\bar{X}$	9.34	19.80	19.54	19.56	13.38	10.26	8.16	47.38
	sd	(4.68)	(6.80)	(3.92)	(3.58)	(4.24)	(2.88)	(4.19)	(8.53)
Total	$\bar{X}$	12.14	19.62	19.67	21.46	12.01	11.02	8.04	45.73
	sd	(6.14)	(7.15)	(4.71)	(2.76)	(4.21)	(2.88)	(4.08)	(10.28)

Table 2

Univariate F-Ratios for Dependent Variables

Variable	MS	F-Ratio*	Probability
Problemscore	451.70	14.59	.001
Supportscore	110.17	2.198	.07
Mastery	24.60	1.112	n.s.
Work Orientation	57.56	8.455	.001
Competitiveness	46.89	2.713	.03
Personal Unconcern	10.57	1.283	n.s.
Locus of Control	78.55	5.024	.001
Need for Affiliation	222.54	2.145	.06

*df = 4, 245

provided a test of group differences at each of the steps. Finally, there was some interest in the table provided by the discriminant analysis program that indicated the extent to which the discriminant functions derived were able to correctly classify individuals in the study.

Group means and standard deviations for all groups on all variables of interest are displayed in Table 1.

Univariate tests revealed significant differences among the groups (see Table 2) on the variables Problemscore ($p < .001$), Work Orientation ($p < .001$), Locus of Control ($p < .001$), and Competitiveness ($p < .03$). Trends approaching significance were revealed on Need for Affiliation ($p < .06$) and Supportscore ($p < .07$). The five groups did not differ significantly on two of the components of achievement motivation as measured by the WOFO-III, namely Mastery and Personal Unconcern.

In order to explore whether various group means were significantly different on specific dependent measures, a number of hypotheses were tested using the Dunn critical values approach.

In this study, 12 such a priori comparisons were made (at .05). In addition, Pearson Product-Moment correlations were computed to test additional hypotheses relating to the relationship between selected variables in selected groups. Each hypothesis and its associated test is described below.

Hypothesis I. Scores on the four components of achievement motivation will be greater among older women and YOung College Men as compared to Young College Women.

Hypothesis IIa. Competitiveness will be greatest among Returnees and lowest among Homemakers, with scores of Applicants falling between the two.

Hypothesis IIb. Personal Unconcern will be lowest (greatest fear of success) among Applicants as compared to the other groups of older women (Returnees and Homemakers).

Hypothesis IIc. Personal Unconcern will be lower among Young College Women as compared to Young College Men.

Hypothesis IIIa. A more internal locus of control will characterize Returnees as compared to other groups of older women.

Hypothesis IIIb. A more external locus of control will characterize the Homemaker group as compared to Returnees and Applicants.

Hypothesis IIIc. A more external Locus of Control will characterize College Women as compared to all other groups.

None of the hypothesized differences were supported.

Pearson Product-Moment correlations were calculated to examine the following hypotheses which explored relationships between selected variables for particular groups.

Hypothesis IVa. For Young College Women and Young College Men, there will be a negative relationship between Need for Affiliation and the four components of achievement motivation.

There was a significant correlation ($r = -.2706$, p .05) only between Need for Affiliation and Worl Orientation for Young College Women. Correlations between Need for Affiliation and Mastery, Work Orientation, Competitiveness, and Personal Unconcern were not significant for Young College Men. Thus, this hypothesis was only partially confirmed for these groups. However, if we examine the correlations between Need for Affiliation and Work Orientation for each of the other groups, we see that for Homemakers there is a significant positive relationship between the two variables ($r = .4281$, $p < .001$), and the same is true for Applicants ($r = .3852$, $p < .01$). For

Returnees, a significant negative correlation (r = -.3474, p < .01) was found between Need for Affiliation and Competitiveness. No relationships were found between Need for Affiliation and the remaining components of achievement motivation (Mastery and Personal Unconcern) for any of the groups.

While previous studies report a generally negative relationship between Need for Affiliation and Need for Achievement, in this older age group much more subtle and complex relationships are revealed here.

Hypothesis IVb. For Homemakers there will be a negative relationship between Problemscore and Work Orientation.

Examination of the intercorrelations calculated between Problemscore and Work Orientation revealed a significant negative relationship (r = -.2833, p < .05). Thus, the perception of many achievement-inhibiting barriers was negatively related to a positive attitude toward paid work in this group. No such relationship was found for any other groups (see Appendix B, Tables B-2 through B-6). Thus, this hypothesis was confirmed.

Examining the relationship between Problemscore and the other components of achievement motivation (Mastery, Competitiveness, and Personal Unconcern), there were no signficant relationships observed for any of theother groups.

Hypothesis IVc. For Applicants, there will be a positive relationship between Problemscore and Locus of Control.

Examination of the correlation between Problemscore and Locus of Control for Applicants indicated a significant positive relationship (r = .2793, p <.05). No such relationship was found for any of

the other groups evaluated (see Appendix B, Tables B-2 through B-6). Thus, this hypothesis was confirmed.

Hypothesis IVd. For Returnees, there will be a positive relationship between Problemscore and Supportscore.

The correlation between Problemscore and Supportscore for Returnees was not significant (r = .1152). Thus, this hypothesis was not confirmed.

To summarize the results of these tests for differences among the groups on particular variables and for significant relationships among variables for particular groups, (1) a significant negative relationship was found between Need for Affiliation and Work Orientation for Young College Women; (2) a significant positive relationship was found between Problemscore and Locus of Control for Homemakers; and (3) a significant positive correlation was found between Problemscore and Locus of Control for Applicants.

Discriminant Analysis

A post-hoc, multiple discriminant analysis was carried out to examine differences among the groups on combinations of the dependent variables. The discriminant analysis approach identified the dimension(s) along which the groups are maximally different.

Stated differently, the purpose of discriminant analysis is to distinguish among the groups by the "best" (i.e., maximally differentiating) weighted combination of the variables evaluated.

A stepwise procedure was selected in order to evaluate on a post-hoc basis the power of each of the variables alone and in combination with others to discriminate among the groups.

Table 3

Discriminant Functions

Function	Eigenvalue	Percent of Variance	Canonical Correlation	After Function	Wilks' Lambda	Chi Squared	df	Significance Level
				0	0.5645727	139.21	24	$p < .001$
1	0.41055	62.89	0.5394948	1	0.7963559	55.447	15	$p < .001$
2	0.17006	26.05	0.3812342	2	0.9317805	17.205	8	$p < .02$
3	0.05435	8.32	0.2270346	3	0.9824190	4.3191	3	n.s.
4	0.01790	2.74	0.1325934					

Of the eight variables in this analysis, the stepwise procedure showed six of the eight to have significant discriminatory power along the five groups (Problemscore, Work Orientation, Competitiveness, Locus of Control, Need for Affiliation, and Supportscore). None of the six were removed. These six variables are presented in Table 3 along with their associated Wilks' Lambda statistics and their respective significance levels.

The following summarizes significant group differences at each step of the analysis. The same information is presented in a pictorial form in Figure 1.

Step 1. With the sole variable Problemscore centered into the analysis, significant differences emerged between Young College Women and Men versus the other three groups ($p < .001$; 1, 245 df). However, no significant differences occurred between the College Women and College Men. Nor were there any significant differences among the Homemaker, Applicant, and Returnee groups.

Step 2. At the second step, with Problemscore and Work Orientation entered, a similar pattern of grouping emerged--i.e., a significant difference ($p < .001$; 2, 244 df) between the Young College Men as well as the Young College Women group versus the remaining three groups. In addition, there was a significant difference between the Young College Women group and the Young College Mem group ($p < .001$).

Step 3. At Step 3, with Locus of Control (3, 243 df) entered, the same pattern of differences was observed.

Step 4. At Step 4, with Competitiveness added to the analysis, the same pattern of differences was observed as in Steps 2 and 3.

Step 5. At Step 5, Need for Affiliation was added. The same

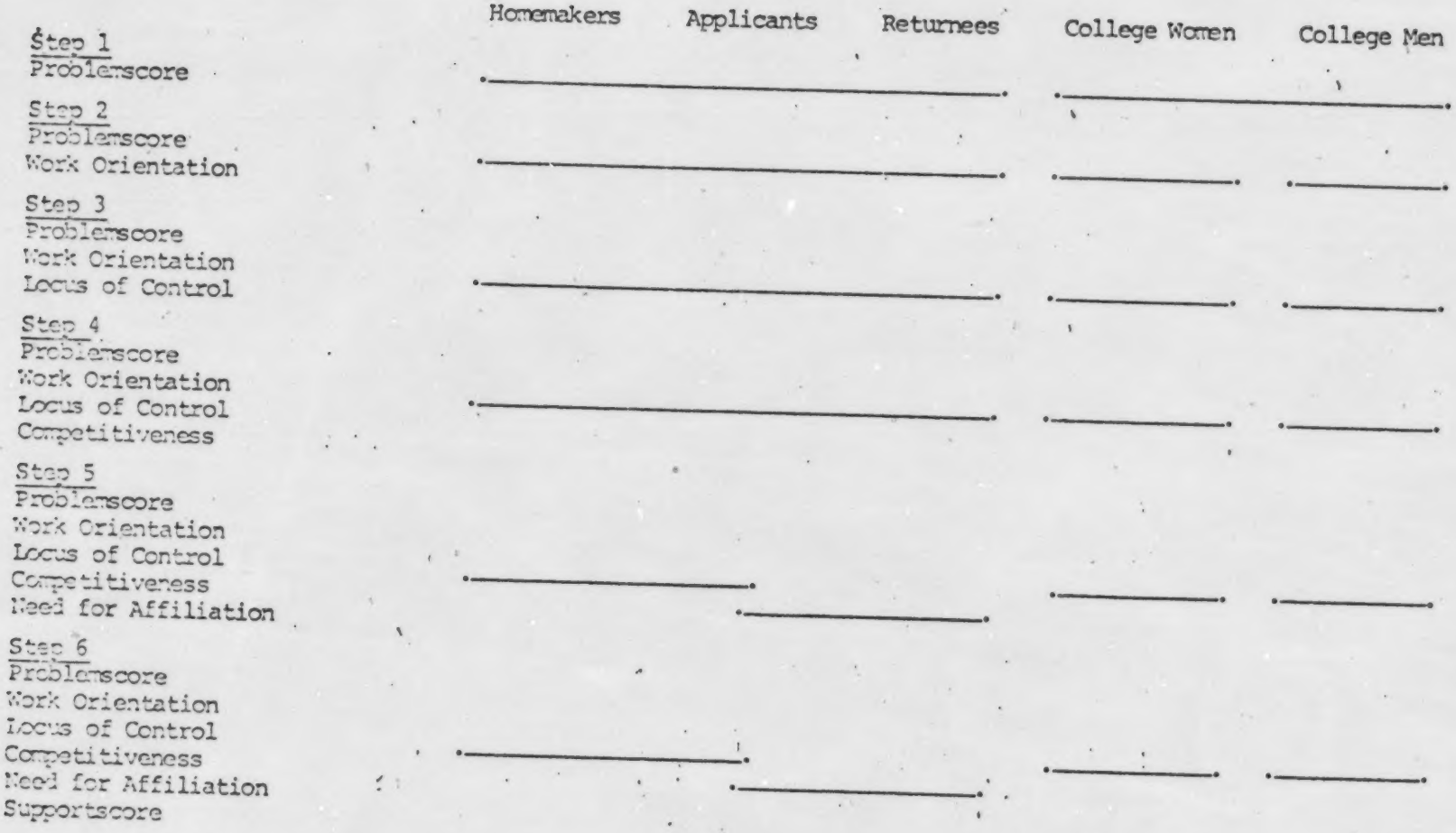

Figure 1. Differentiation among groups on the first discriminant function based on stepwise evaluation of significantly discriminating dependent measures (groups connected by solid line do not differ significantly).

differences occurred between the grouping of younger college aged individuals versus the other three groups ($p < .001$; 5, 242 df). Also, a significant difference emerged between the Returnee and Homemaker groups ($F = 2.68$, $p < .02$; 5, 241 df).

Step 6. With the inclusion of all six variables into the analysis, the first discriminant function emerges and we can now describe the first dimension on which the groups differ. The relationship between the stepwise analysis and the calculation of the first discriminant function may be better comprehended by examination of Table 4 and then Table 3. With all six variables entered (Table 4), we observe a Wilks' Lambda (a measure of group discrimination) of .56457. In Table 3, we likewise observe that, with no functions removed (all variables considered), the Wilks' Lambda is the same .56457.

Three significant discriminant functions were calculated (see Table 5), accounting for over 97% of the variance among the groups. The functions represent the dimensions along which the groups differ.

A study of Tables 5 and 6 reveals information regarding the relationship between the means of the various groups on the dependent variables and the derived discriminant functions.

If we accept the arbitrary convention of interpreting discriminant weights with absolute magnitudes of .50 or greater, the interpretation of the first discriminant function is somewhat different from that provided by the stepwise analysis discussed earlier. Only Problemscore has a discriminant weight (.79266) of greater than .50. In the stepwise analysis, Work Orientation with a weight of .45763, Locus of Control with a weight of -.37994, Competitiveness with a weight of -.29675, Need for Affiliation with a weight of -.22892, and Supportscore with a weight of -14576 all contributed to the

Table 4

Summary Table of Stepwise Discriminant Analysis

Step	Entered	Variables In	Wilks' Lambda	Significance Level
1	Problemscore	1	0.80765	$p < .001$
2	Work Orientation	2	0.71072	$p < .001$
3	Locus of Control	3	0.65193	$p < .001$
4	Competitiveness	4	0.62001	$p < .001$
5	Need for Affiliation	5	0.58864	$p < .001$
6	Supportscore	6	0.56457	$p < .001$

Table 5

Standardized Discriminant Function Coefficients

	1	2	3
Problemscore	0.79266	0.29540	0.05355
Supportscore	-0.14576	-0.20938	0.64885
Work Orientation	0.45763	-0.79274	-0.08380
Competitiveness	-0.29675	0.35458	0.34964
Locus of Control	-0.37994	-0.51637	-0.32110
Need for Affiliation	-0.22892	0.34631	-0.71008

Table 6

Discriminant Functions Evaluated at

Group Centroids

Group		Function 1	Function 2	Function 3
1	Homemakers	0.32051	0.02544	-0.35502
2	Applicants	0.48273	-0.01395	-0.10737
3	Returnees	0.70824	0.10349	0.34884
4	Young College Women	-0.62917	-0.69589	0.07403
5	Young College Men	-0.88231	0.58091	0.03951

overall discriminant function.

Examination of the second discriminant function reveals negative contributions on Work Orientation (-.79274) and Locus of Control (-.5163). Evaluating the group centroids in this function, we see College Men (.58091) and College Women (.69589) differ most on this function. Thus, College Men most closely fit the profile of lower Work Orientation and a more internal Locus of Control. College Women may then be seen to comprise most nearly the inverse of this profile; i.e., they demonstrate high Work Orientation and a more external Locus of Control. From this finding, we see an aspect of achievement motivation on which young women and young men appear to differ the most. Some insight into the nature of this relationship may be gathered later from the descriptive data, in which the young men describe receiving financial support to aid them in their studies; thus, having to work at this point in their lives might be more considered an impediment to their finishing their college studies. Very few of the young women indicated they received financial support and, thus, for them paid work might be considered much more positively. Because they are investing their own money, females are much more concerned about the return they will get on their investment.

The high degree of externality exhibited by the Young College Women group is in keeping with previous research on Locus of Control among similarly aged women.

The third function loads most heavily on Supportscore (.64885) and most negatively on Need for Affiliation (-.71008). Evaluating the group centroids once again, we observe that Returnees (.34884) are maximally differentiated from Homemakers (-.35502) on this function. That is, Returnees most closely approach the profile of

scoring high on Supportscore and low on Need for Affiliation. This is an interesting finding in view of the high Problemscore which so strongly differentiated Returnees on the first function. We thus observe Returnees to describe the greatest number of perceived problems as well as the greatest support for their college endeavor. The negative loading on Need for Affiliation is intriguing in that it may imply that, in spite of obstacles and supports from others in the life situation of Returnees, these are minimally attended to. That is, it is not the forces generated from other people that move the Returnee to continue her college education but perhaps more internal, dispositionally related factors.

From the evaluation of the discriminant analysis, complex combinations of variables were seen to significantly differentiate among the various groups. A remaining question was how accurate the variables selected for evaluation were in predicting the actual group membership of the subjects participating in this study. The discriminant procedure produced a classification table in which the subject's actual group membership is compared with that predicted by the subject's score on the dependent measures. As may be seen in Table 7, the discriminant analysis was successful in predicting the membership of the Returnees (50%), Young College Women (62%), and Young College Men (56%). Group membership was correctly predicted for only 12% of the Homemaker group, while 32% of the Applicant group was correctly classified. This offers good indication that the variables selected for evaluation more accurately predict the group membership of the very groups who are engaging in overt achievement behavior, namely the Young College Women, Young College Men, and the Returnees, all of whom are engaging in behavior related

Table 7

Frequencies for Correct and Incorrect Classification into Groups*

Actual Group	Number of Cases	Predicted Group Membership				
		1 Homemakers	2 Applicants	3 Returnees	4 Young College Women	5 Young College Men
1 Homemakers	50	13 12%	6 12%	13 26%	9 18%	9 18%
2 Applicants	50	13 26%	16 32%	15 30%	5 10%	1 2%
3 Returnees	50	8 16%	9 18%	25 50%	3 6%	5 10%
4 Young College Women	50	5 10%	4 8%	2 4%	31 62%	8 16%
5 Young College Men	50	2 4%	3 6%	6 12%	11 22%	28 56%

*45% of cases were classified correctly

to the accomplishment of a long-term goal--the completion of a college degree.

Summary of Results

Three groups of older women (Homemakers, Applicants, and Returnees) and two groups of young college students (Young College Women and Young College Men) were evaluated as to achievement motivation (Mastery, Work Orientation, Competitiveness, and Personal Unconcern), and four related variables. These latter included Need for Affiliation, Locus of Control, perception of external achievement inhibiting problems (Problemscore) and perception of external achievement-facilitating supports (Supportscore).

The results of tests for significant relationships between variables for particular groups indicated that for Young College Women there was a significant negative relationship between Need for Affiliation and Work Orientation. For Homemakers, a significant negative relationship was found between Problemscore (perceived external problems) and Work Orientation. For Applicants, a significant positive relationship was found between Problemscore and Locus of Control.

A stepwise multiple discriminant analysis was carried out on the first discriminant function. Of the eight dependent variables, six were found to help differentiate among the five goups: Problemscore, Worl Orientation, Competitiveness, Locus of Control, Need for Affiliation, and Supportscore. These same variables were utilized in producing the two other significant discriminant functions. In calculating the first dimension along which groups were most different, Returnees were found to be most different in terms

of reporting significantly more external problems (Problemscore). Returnees were found to be most different from Young College Women and Young College Men, who reported the least external problems. The second function calculated showed College Men to be most different from College Women, with the former indicating a more negative attitude toward work (Work Orientation) and a more internal Locus of Control. College Women were found to demonstrate more the inverse of this profile--i.e., positive Work Orientation and a more external Locus of Control. A third function showed Returnees to be most different from Homemakers on Supportscore and Need for Affiliation, with Returnees indicating many sources of support for their achievement behavior and a low Need for Affiliation. Homemakers were found to more demonstrate the inverse of this profile.

Discussion

The core issues in this study were four: (1) What is the nature of achievement motivation among older women (age 30 to 50) and how does it manifest itself in the behavior and personality of various groups of older women? (2) How do various psychological factors (known to have important relationships to achievement motivation in more well-studied populations) vary in this population of older women? (3) How do achievement motivation and related factors differ in older women as compared to young men and women; i.e., is there a developmental aspect to the need to achieve and related factors, and are these developmental factors related to a person's sex? (4) Is there a relationship between an objective (questionnaire) measure of achievement motivation and overt achievement behavior (here defined as beginning a college program after age 30)?

The overall analysis revealed significant differences among the five groups on Problemscore (perception of achievement-inhibiting problems), Work Orientation, Locus of Control, and Competitiveness. Thus, the overall analysis revealed the strongest area of difference among the groups to be the impact of external problems which are viewed as barriers or obstacles to the overt expression of achievement behavior. It was surprising that only two of the four components of achievement motivation (Work Orientation and Competitiveness) were significantly different across the five groups. This finding will be discussed in greater detail later. Locus of Control has been known to vary importantly with different levels of achievement motivation and otehr personality variables. This variable emerged as indicative of a sex as well as an age difference among the groups studied here.

The hypothesized differences among the group on specific variables were not supported. However there was partial support for a negative relationship between need for affiliation and the components of achievement motivation. Specifically, a significant negative relationship was found between Need for Affiliation and Work Orientation for College Women. No relationships between Need for Affiliation and any of the components of achievement motivation were found for College Men.

The finding of this relationship is of interest because it offers additional insight into previously established knowledge about the relationship of Need for Affiliation and achievement motivation. Later, it will be seen that College Women are quite different from College Men in their attitude toward work and yet here we see another facet of that relationship, namely that a positive attitude

toward work is inversely related to a need for affiliation. This finding is open to several interpretations. One obvious one is that young women who are highly motivated by affiliative needs view paid work as an obstacle in the way of fulfillment of these affiliative needs in that the relationships in the work place are not conducive to satisfying affiliative needs. Therefore, the more important affiliative concerns are to the young woman, the more neagatively is the work place viewed. That is, working takes time away from the opportunity to fulfill affiliative needs. This finding may also be interpreted in terms of the choices and dilemmas facing the young adult woman at this point in her life and at this time in our society. That is, the College Woman must decide how important the work place and paid work is going to be in her life as opposed to the more traditional orientation of focusing on her social and ultimately marital relationshp. This finding of a negative relationship between attitudes toward work and need for affiliation among young women offers some insight into the fact that women's attitudes toward paid work as a central concern are distributed along some continuum and, therefore, we find variation in these women's attitudes toward work as well as in their attitudes about the importance of social relationships. It is also interesting to note that among Applicants and Homemakers a significant positive relationship was found between Work Orientation and Need for Affiliation. This represents the first suggestion of a developmental quality among one component of achievement motivation (Work Orientation) and sex. That is, for Homemakers (who by definition are not engaged in paid work) and Applicants (who may or may not be working full time, a more positive attitude toward work is

related to greater needs for affiliation. The significantly negative correlation for Returnees between Need for Affiliation and and the Competitiveness component of achievement motivation adds even more complexity to the issues at hand.

The confirmation of a significant negative relaitonship between Problemscore and Work Orientation for Homemakers is also of interest. The greater the number and seriousness of external environmental problems perceived by the Homemaker, the more negative is her attitude toward paid work. This is consistent and logical in that to be surrounded by so many environmental problems and to feel positively about paid employment would surely result in a state of great cognitive dissonance.

The hypothesized positive relationship between Problemscore and Locus of Control for Applicants was confirmed. Applicants were envisioned as a particularly good source of insight into the nature of achievement behavior among older women. It was hoped that some knowledge would be gained about the sources that modify achievement striving among older women by evaluating a group that initiates overt achievement behavior but does not carry it out. It was particularly expected that the relationship between the more internal dispositional factors influencing achievement behavior and the more external situational factors would be more clearly delineated in this group which lies between those actively pursuing a college program and those who do not. Here we observe that the greater the degree of external problems perceived, the more external is the Locus of Control. This finding implies that external problems such as competing role demands must not be overlooked in drawing conclusions as to the circumstances which underlie whether an older woman will display overt achievement behavior or not.

It was hypothesized that for Returnees there would be a balance between the number of supports and the number of obstacles in her life situation, but this was not confirmed. Apparently, while external problems and external supports are critical issues in the achievement behavior of the groups concerned, once again these variables can not be considered apart from the other factors involved.

All of the relationships discussed so far raise the central issue of direction of causality. We must be concerned with whether a life situation of many perceived problems leads to a more external Locus of Control, or whether a person whose personality was characterized by an external Locus of Control would therefore perceive many external prolems. Further, if the person characterized by this configuration of a positive relationship between Problemscore and external Locus of Control more typifies Applicants rather than any other group, does this configuration cause the woman to be unable to persist in her achievement behavior, or is the inverse true? Does her inability to persist in achievement behavior lead to this configuration of external Locus of Control and high Problemscore? Such a line of reasoning siggests the direction that future research might take in this area. Causality is of central importance in comprehending the achievement behavior of older women.

Discriminant analysis is a useful statistical tool in attempting to uncover the complex relationships among and between the five groups of interest, and the eight dependent variables evaluated. Such an approach to the data obviates looking at differences among the groups on the basis of one variable at a time. Instead, it offers insight into how groups differentiate on a weighted combination

of the variables and the magnitude of such differential combinations.

The first issue was whether all eight variables were necessary to best describe differences among the groups. The computer analysis selected six of the eight variables as the ones indicating maximal differences among the groups. These were, in the order of their differentiating ability: Problemscore, Work Orientation, Competitiveness, Locus of Control, Need for Affiliation, and Supportscore. It is important to consider once again the two unselected measures, Mastery and Personal Unconcern. That two of the unselected measures are key components of achievement motivation again raises the issue of the relaitonship between questionnaire measures of achievement motivation and overt achievement behavior. This also implies that, since there truly are behavioral differences among these groups, the differences do not apparently lie solely in the area of achievement motivation, thus raising additional questions for future inquiry and exploration.

Mastery is one of the cluster of stereotypically masculine attributes (Deaux, 1976), yet here we find that the groups under study do not at all differ in this regard. Thus, Mastery does not appear to be any more or less characteristic of any of the groups studied.

The Personal Unconcern element of the WOFO-III sought to evaluate the Fear of Success among the groups. There were no differences in fear of negative consequences for success among the older women (even those breaking tradition by returning to college at a nontraditional age), nor was there any such fear or concern found among Young College Women compared to any group. Thus, this study

is in keeping with previous research which finds the concept of fear of success to be a rather ephemeral phenomenon (Hoffman, 1972, 1974; Zuckerman & Wheeler, 1975).

The multiple discriminant analysis approach to the data shows clearly that two factors determined to be elements of achievement motivation--Worl Orientation and Competitiveness--in combination with two additional dispositional factors (Locus of Control and Need for Affiliation) and two situational factors (Problemscore and Supportscore) do, in fact, differentiate significantly among and between the groups. The first discriminant function derived showed how the groups are distributed along a first dimension formed from a weighted combination of the variables evaluated. This and the second and third discriminant functions will be discussed later.

Examining the actual differences found among the variables of interest, a weighted combination of all six variables grouped the older women (three gorups) as being significantly different from the younger college students. We may, therefore, conclude that these older women (regardless of any overt achievement behavior) significantly differ from a combined (male and female) group of younger college students on these very achievement-related variables. Homemakers and Returnees were also observed to differ significantly from each other, thus lending support that Returnees do, in fact, differ from the other groups of older women on a configuration of achievement-related factors. To state this more succinctly, the older women do appear to differ significantly from the younger groups, and the Returnees (who demonstrate overt achievement behavior) do differ from Homemakers (who demonstrate no overt achievement behavior); but the differences are evident only when all six

of the discriminating variables are considered, not on just the achievement motivation variables.

The stepwise analysis employed also informs us as to the point at which, in the consideration of all the variables, differences emerge between Young College Women and Young College Men. With the evaluation of only Problemscore and Work Orientation, we observe the young women and men to differ significantly. This is, of course, relected in the second discriminant function, which quantifies the differences between these two groups on a second dimension. While stereotypic notions might suggest that College Men would be more work oriented, inspection of the group means indicates the contrary to be true. This finding is interpretable in several ways. An optimistic possibility is that perhaps Young College Women are fully aware of improving opportunities for women in the work force. Therefore, the anticipation of paid employment has a positive valence for these young women. A more pessimistic view is one expressed by Carder (1977), who reported similar findings of a positive attitude toward work on the part of college women. This researcher concluded that young college women have an unrealistically positive picture of the kinds of work they are likely to end up doing. A third possibility may be that women may fantasize themselves in work they would really like to do and see their college experience as preparatory for this desirable employment situation (which may or may not be realistic). Young men, on the other hand, may more likely fantasize themselves in work which "pays enough" regardless of any interest or personal value that the work may hold for them.

The differentiation between young women and young men continued

with the consideration of scores on Locus of Control, Competitiveness, and Affiliation. Young College Women scored the most "external" on the Rotter I-E Scale (Rotter, 1966). This is in keeping with the general trend of the literature, though some notable exceptions were mentioned in the introductory chapter. With Need for Affiliation added to the analysis, the present study found College Men to still differ significantly from College Women but (contrary to the trend of previous research) with College Men demonstrating greater Need for Affiliation as compared to College Women.

As mentioned before, the calculation of three significant discriminant functions gives us three distinct response profiles on the six outcome measures. Members of the Returnee group were found to be the most likely to demonstrate the first profile of perceiving a great many external problems. That Returnees are characterized by this particular outcome lends support to the notion that Returnees are propelled more from internal drives than from external supports. This is the group with the greatest degree of perceived environmental barriers to achievement behavior, but which persists in their overt achievement behavior.

The second weighting of the outcome measures maximally differentiates the College Men from the College Women on Work Orientation and Locus of Control. Here we may examine how the configuration of achievement-related variables differs between these two groups. The College Men's low scoring on Work Orientation has been discussed above. The strong difference in Locus of Control between the women and men is also noteworthy. The highly external Locus of Control exhibited by the College Women is in keeping with previous research (Alper, 1973); Bedeian & Hyder, 1977; Phares, 1977).

These researchers generally concur that the socialization of young women in our society emphasizes an accommodative posture toward the workd; i.e., the well-adapted young woman must be aware of and attend to the reality that her future life will, to a great extent, depend on external factors--or, more precisely, on the life course of her spouse or partner.

The third discriminant function maximally differentiates between Returnees and Homemakers, particularly on Need for Affiliation and Supportscore. Returnees were found to be more likely to exhibit the profile of scoring high on Supportscore and low on Need for Affiliation. Homemakers were more likely to exhibit the inverse of this profile. The low scoring on Need for Affiliation exhibited by the Returnees is striking. As discussed previously, Returnees and Homemakers differed significantly on the evaluation of all six critical outcome scores (Problemscore, Work Orientation, Competitiveness, Locus of Control, Need for Affiliation, and Supportscore) and, in keeping with this, the third discriminant function describes the two groups to differ maximally on affiliative needs and perceived supports for their achievement behaviors. The literature on achievement motivation generally shows an inverse relationship between Need for Affiliation and Need for Achievement. This study fails to find such a relationship in any group except Returnees. Thus, we see that, while previous investigation and testing for differences between Returnees and other groups on individual variables, the discriminant approach shows a clear distinction between Returnees and the other groups of older women. It further demonstrates that the relationship between Need for Affiliation and overt achievement behavior is the same as the literature demonstrates for young men.

To summarize, we see that the Returnee group is characterized by a perception of many environmental problems, be positively oriented toward work, have a more internal Locus of Control, and to perceive environmental supports for overcoming their problems and expressing their achievement strivings. The totality of factors which differentiate Returnees from other groups are now clear.

The eight dependent variables selected for study were successful in predicting group membership of 45% of the subjects involved. Since only 20% accuracy would be achieved by chance alone, it is evident that there is relevance as well as discriminatory power in the variables evaluated. By inspecting the classification table (Table 7), we also see that scores on these achievement-related variables were particularly potent in correctly classifying those groups (Returnees, 50%; College Women, 62%; and College Men, 56%) which demonstrate overt achievement behavior, namely initiating a college program. Thus, the variables considered, are particularly relevant to uncovering differences among the groups of interst.

Summary

Three groups of older women (ages 30 through 50) and two groups of younger college students (ages 18 through 24) were evaluated and compared on a measure of achievement motivation. The groups of older women were made up of women who either pursued a traditional role (Homemakers), demonstrated overt achievement behavior in the form of beginning a college program (Returnees), or vacillated in the sense that they initiated admission to a college program but did not persist and begin attending (Applicants). A newly developed (Helmreich & Spence, 1978) measure of achievement motivation (WOFO-III) evaluated four components of achievement motivation: Mastery, Work Orientation, Competitiveness, and Personal Unconcern (fear of success). Other achievement-related factors measured were Locus of Control and Need for Affiliation. Two situational factors evaluated were Problemscore (subjects' perceptions of external barriers and obstacles inhibiting overt achievement behavior) and Supportscore (subject's perceptions of supports for the overt expression of achievement striving.

Tests for hypothesized group differences on specific dependent variables failed to demonstrate significant differences among the groups on the particular variables examined.

For College Women a significant negative relationship was found between Need for Affiliation and Work Orientation. For Homemakers, a significant negative relationship was found between Problemscore and Work Orientation. A third significant finding was that of a positive relationship between Problemscore and Locus of Control for Applicants.

The derivation of three significant discriminant functions

identified the dimensions on which groups differed. The first function delineated Returnees to be differentiated by their high degree of Problemscore (perception of many barriers and obstacles to achievement behavior). A second function found Young College Women and Young College Men to be significantly different from each other. College Men demonstrated low Work Orientation and a more internal Locus of Control. Young College Women demonstrated high Work Orientation and a more external Locus of Control. A third pattern of significant differences emerged between Homemakers and Returnees, with Returnees scoring higher on their perception of environmental supports and lower on a Need for Affiliation than did Homemakers.

A stepwise discriminant analysis indicated significant differences among the five groups on Problemscore, Work Orientation, Locus of Control, Competitiveness, Need for Affiliation, and Supportscore. Maximally significant differences on this weighted combination of variables were found between Homemakers and Returnees as well as between College Women and College Men.

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